

**ABSTRACT OF THE DISCLOSURE****Optical Component Installation and Train Alignment  
Process Utilizing Metrology and Plastic Deformation**

5

A micro-optical train manufacturing process includes a step of characterizing the position of optical components on an optical bench, typically using a metrology system. These optical components are then aligned with respect to each other in a passive alignment step based on data from the metrology system and optical system design information. As a result, a subsequent active align process can be avoided in some situations, or if a subsequent active alignment process is performed, the time required for that active alignment process can be reduced because of this initial metrology-based passive alignment step.

10